

DRYOPTERIS FILIX-MAS X MARGINALIS PRODUCED IN CULTIVATION

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As an addendum to Mr. Winslow's description of *Dryopteris filix-mas* x *marginalis*, mention should be made of another plant properly to be identified as this hybrid, which was produced by Mr. Amedée Hans several years ago, and of which a leaf is preserved in the herbarium of the New York Botanical Garden.

The plant was one of many raised from a sowing of a mixture of *filix-mas* and *marginalis* spores, but was the only one of the lot which could not be identified with either one of the species, although suggestive of both in many of its characters, viz., in stipe-scales, in the margin of the pinnulæ, and in the position of the sori. The leaf is somewhat abnormal in that the apices of the blade and pinnæ are all more or less blunted and irregular so that the general outlines of the blade and pinnæ cannot properly be compared to those of Mr. Winslow's plant. The pinnæ, however, appear to be considerably broader than in his specimen.

The sori are very small and the indusia are strongly convex, the margins being closely appressed to the leaf tissue. When examined under a microscope, only small, colorless aborted sporangia were found, although the leaf was collected in September, two or three months after the normal fruiting period of either of the species named.

Some botanists may object to the identification of this plant as a hybrid, because, forsooth, no one is known to have observed the fusion of the sexual cells of *Dryopteris filix-mas* and *D. marginalis*. To them this specimen and many others are hereby-referred, with an earnest request for the proper identifications.

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